ON THE CUTTING EDGE

Few things contribute more to the quality of life that we enjoy in the United States than the way in which technological innovations grow and adapt to meet our needs for comfort and convenience. We are pioneers by nature, and our vision of the future is frequently tied to a more proficient and enjoyable way of life thanks to these technological advances.

I have always been fascinated by the intersection of policy, economics and technology—it has been the hallmark of my career. In Congress, I served on the Committee on Science, Space and Technology; afterward I served for eight years as president and CEO of the Electronic Industries Alliance, and then I led the Alliance of Automobile Manufacturers. I have always been engaged in guiding the research, development and implementation of the equipment that supports Americans and the policy discussion that surrounds it. While delivering essential energy from deep within our earth’s surface to homes and businesses might seem to some like a far cry from that world, it certainly is not.

Everything we do relies on energy. Our lives and our livelihoods depend on harnessing our natural resources and on effectively and efficiently delivering energy to our increasingly ubiquitous devices and appliances—fueling our lives. Like the companies that are constantly innovating to make your commute faster or your smartphone smarter, natural gas utilities are also always working to improve their products and services. This effort touches every facet of the business, from replacing pipelines that are no longer fit for service with ones made from more modern materials, to developing mobile applications that enable customers to track their energy use and become more efficient.

In this issue of American Gas, we explore some cutting-edge technological innovations that are moving our industry forward. Detroit-based DTE Energy is working on a program to use virtual reality to train some of its employees to handle potentially dangerous situations. Chesapeake Utilities and Florida Public Utilities worked together on a combined heat and power plant fueled by natural gas, which generates 20 megawatts of power for customers on Amelia Island in Florida. Southern California Gas Co. has a power-to-gas system demonstration project—a first in the United States. It converts electricity into gaseous energy and could provide North America with a large-scale, cost-effective solution for storing excess energy produced from renewable sources. This is a story that we must tell. Natural gas supports other forms of renewable energy, and the companies that deliver it continue to push the envelope in order to forge new energy horizons. Not only are we modernizing our systems and service offerings, we are a key part of a low-carbon future.

Of course, our increasingly wired world puts us all at greater risk of cyberattack—a topic we also cover in this issue. This has always been the flip side to my career pushing technological innovation. Protecting our companies and our customers has been a shared goal of everyone in AGA’s leadership for many years now, and natural gas utilities are leading on cybersecurity. The Downstream Natural Gas Information Sharing and Analysis Center that we created in 2015 is up and running, sharing critical cybersecurity information with the rest of the natural gas industry, electric utilities and necessary law enforcement entities. We must always remain vigilant and understand that cyberattacks are inevitable. It is how these attacks are handled that will determine the safety of our systems and our industry in the future.

I have heard several AGA chairmen use the phrase, “We do not rest on our laurels.” It is true. The affordable price of natural gas—another product of technological innovation—means that more homes and businesses use natural gas today than ever before, and the numbers continue to increase. We will continue to plan for the future and our place in it by exploring more efficient and effective ways to meet our customers’ needs.

Technological innovations are moving our industry forward.

At the same time, there are greater risks. We must remain vigilant and continue to plan for our future and our place in it. BY DAVE MCCURDY

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